

REMARKS

Applicants incorporate herein by reference their Response G (After Final) to the Final Rejection of March 2, 2005. As explained therein, the rejections in the Final Rejection are insufficient to make a prima facie case of obviousness, provide an insufficient motivation for combining references, and improperly combine references. As a result, it is respectfully submitted that this Final Rejection was issued in error and should be withdrawn. Accordingly, Applicants request the issuance of a Notice of Allowance or a new Office Action for this application.

Applicants are providing the following additional comments in response to the Examiner's comments in the Advisory Action of June 27, 2005.

In the Final Rejection and Advisory Action, the Examiner rejects the claims under 35 USC §103(a) as being unpatentable over Kadota et al. (US 5,818,550) in view of Zhong et al. (US 5,994,721) and other references.

Each of these rejections is respectfully traversed.

As Applicants previously explained, and the Examiner admitted, Kadota does not disclose a color filter, wherein the color filter covers the entire first thin film transistor, as recited in the claims of the present application. The Examiner, however, cites Zhong and uses a combination of either just Kadota and Zhong, or Kadota and Zhong with the other prior cited references to reject the claims of the present application. In support of the combination of Kadota with Zhong, the Examiner states:

“However, Zhong discloses (see, for example, FIG. 6(c)) a semiconductor device comprising a color filter 101, which covers a thin film transistor comprising a gate electrode 17. The color filter has a vias 35 for a pixel electrode that contacts the thin film transistor. The color filter permits an individual color to be displayed from a color display device. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to have a color filter, wherein the color filter covers the entire first thin film transistor in order to display an individual color from a color display device.”

Applicants respectfully disagreed and pointed out that a prima facie case of obviousness has not been established as the Examiner has not shown a motivation to combine Kadota with Zhong to arrive at the claimed invention, as required in MPEP §2142.

As explained previously, Kadota discloses color filter 9 divided into discrete segments 9R, 9G and 9B. See e.g. Fig. 1, col. 3, lns. 56-57 and col. 4, lns. 29-30 in Kadota. These discrete segment color filters are separated from one another and in no way cover the entire TFT (and in fact, if they cover any part of the TFT, it is an extremely small portion, as shown in the attached colored version of Fig. 1 from Kadota). It is clear that Kadota *specifically* designed this structure so that these color filters are separated and not over the TFT. Kadota states that “*The critical feature* of the laminated structure resides in the provision of the third layer between the second and third layers.” Col. 4, lns. 40-42 (emphasis added). This third layer is planarization film 10 which separates the color filters from the pixel electrodes, protects the color filters against damaging force which may be applied to the color filters in subsequent steps of the manufacturing process, prevents impurities in the color filters from spreading into the liquid crystal, and fills in the concavities and convexities presented by the TFT and the color filters. See e.g. col. 4, lns. 29-47, col. 5, ln. 61 - col. 6, ln. 3 and col. 7, lns. 36-47 in Kadota. Clearly, the planarization film (or third layer) is an important and critical component of the device and disclosure in Kadota and is required to meet the objection of the invention in Kodata (see e.g. col. 2, lns. 17-22 in Kadota).

The Examiner appears to overlook this teaching and criticality in Kadota and contends that “[t]he color filter 101 from Zhong would be substituted for the color filters 9R, 9G, and 9B in Fig. 1 of Kadota underneath the planarization film 10” to render obvious the claimed invention. In support of such combination, in the Advisory Action, the Examiner states:

“It would have been obvious to one of ordinary skill in the art at the time of invention to have the one color filter (that covers the entire thin film transistor) instead of the three separated different color filters of Kadota in order to concentrate one color in the display and avoid any possible interference effects between adjacent filters.” (emphasis added)

Applicants have reviewed the cited references and cannot find the underlined description or something corresponding to it in the references. Applicants believe that the Examiner is making this statement as a suggestion or motivation to modify the references based on official notice. Applicants respectfully disagree and do not believe that the underlined statement is in the knowledge generally available to one of ordinary skill in the art.

MPEP 2144.03 states:

“While “official notice” may be relied on, these circumstances should be rare when an application is under final rejection or action under 37 CFR 1.113. Official notice unsupported by documentary evidence should only be taken by the examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known.”

Applicants respectfully submit that this statement by the Examiner is not “capable of instant and unquestionable demonstration as being well-known.” MPEP 2144.03 further states that where a statement is not capable of instant and unquestionable demonstration as being well-known or when Applicant challenges a statement as not properly based on common knowledge (as Applicants are doing here), then “the examiner must provide documentary evidence in the next Office action if the rejection is to be maintained.” Accordingly, Applicants respectfully submit that if the Examiner maintains this rejection, then the Examiner needs to provide documentary evidence in support of this reason for combining the references.

Further, this modification appears to be in direct contrast to the specific teaching in Kadota to have separate, discrete color filters which are not over the TFTs. There is no apparent reason to modify these filters into a color filter covering the entire TFT, as in the claimed

invention. Furthermore, the Examiner's contention is incorrect as Zhong does not teach one color filter but teaches the color filters 101 are provided to pixels of R, G, B and W, individually (see e.g. Fig. 1 in Zhong). Hence, the references teach away from the proposed combination to arrive at the claimed invention. As stated in MPEP 2145(D)(2), "It is improper to combine references where the references teach away from their combination."

Accordingly, Applicants respectfully submit that the rejection is improper as the Examiner has failed to provide sufficient motivation for the combination of these references, the alleged motivation is unsupported by the references and not supported by any documentation, and the references teach away from the Examiner's proposed combination.

Accordingly, it is respectfully requested that these rejections be withdrawn, and the claims allowed.

New Claims

Applicants are adding new dependent Claims 119-128 which recite that the gate electrode is covered by the interlayer insulating film. Applicants respectfully submit that this feature is not disclosed or suggested by cited references. Further, as each of these claims is a dependent claim, they are allowable for at least the same reasons as the independent claims. Accordingly, it is requested that these new claims be entered and allowed.

If any fee should be due for these new claims, please charge our deposit account 50/1039.

Information Disclosure Statement

Applicants are preparing an information disclosure statement (IDS) and will submit it in the next couple of days. It is respectfully requested that this IDS be entered and considered prior to the issuance of any further action on this application.

Conclusion

Accordingly, Applicants respectfully submit that the present application is in a condition for allowance and should be allowed.


If any further fee is due for this amendment, RCE or extension of time, please charge our deposit account 50/1039.

Favorable reconsideration is earnestly solicited.

Respectfully submitted,

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